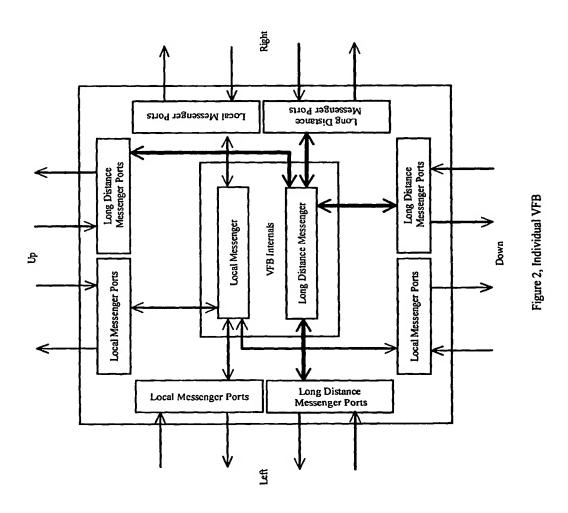
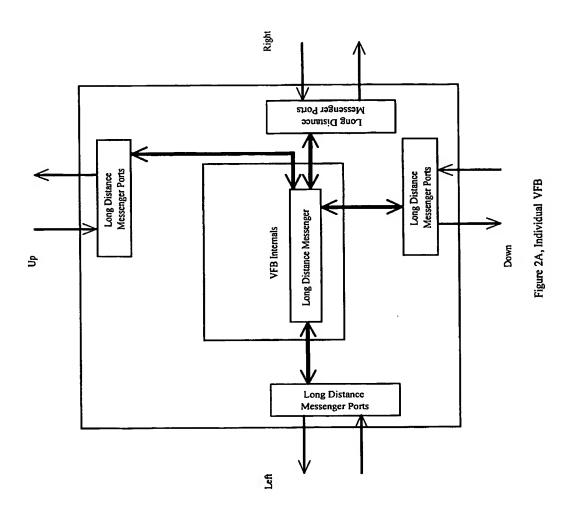


Figure 1, Messenger Interconnected Processor Array



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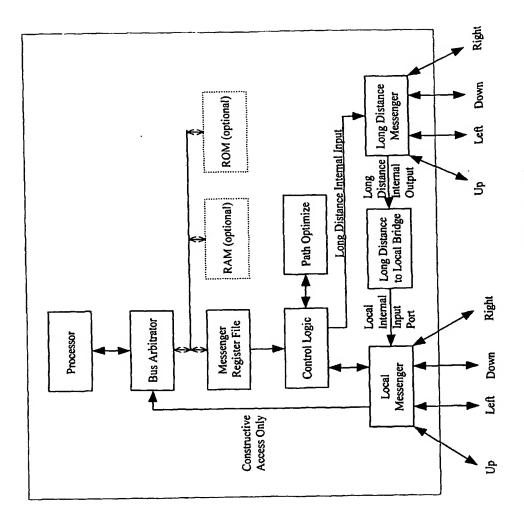


Figure 3, VFB Internals

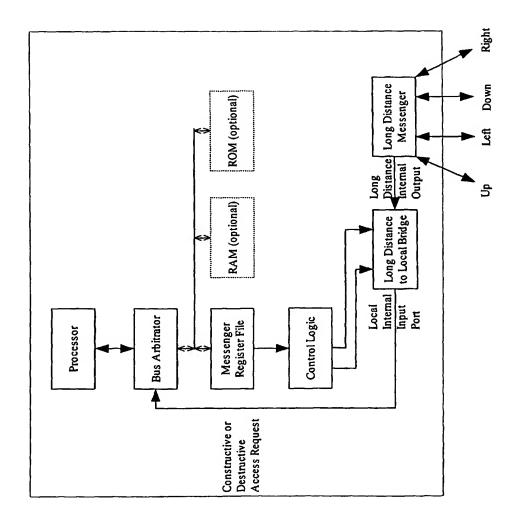
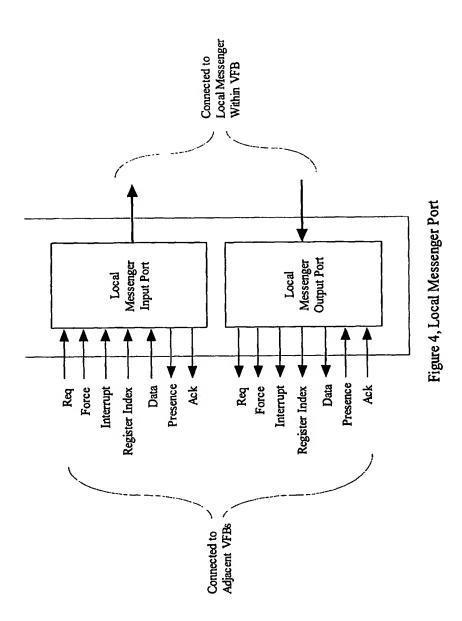


Figure 3A, VFB Internals



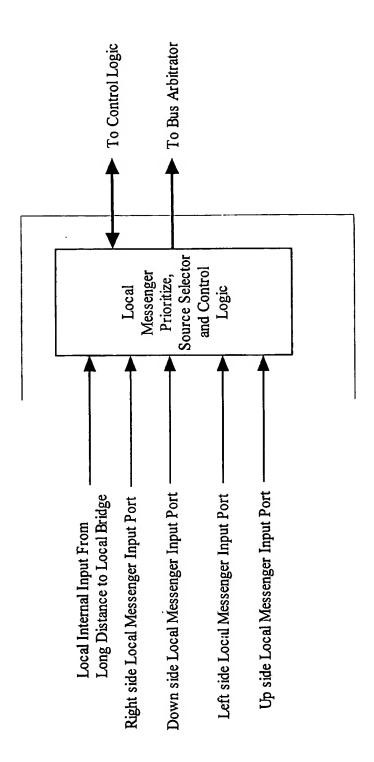


Figure 5, Local Messenger

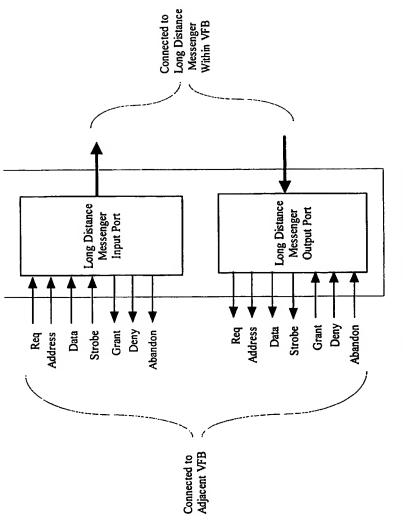


Figure 6, Long Distance Messenger Port

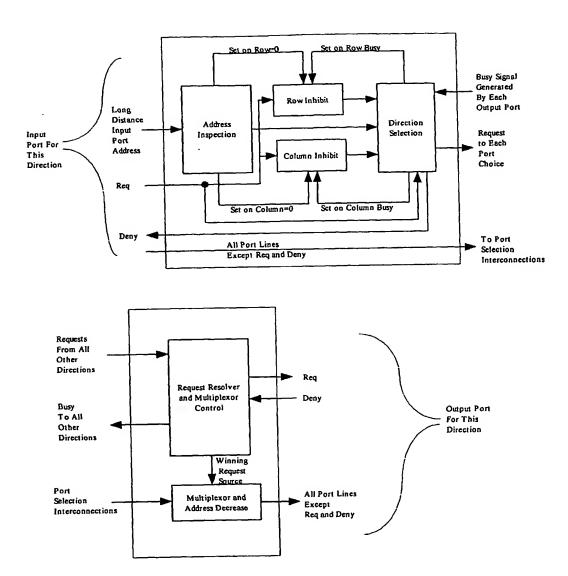


Figure 7, Long Distance Messenger Port Control Logic

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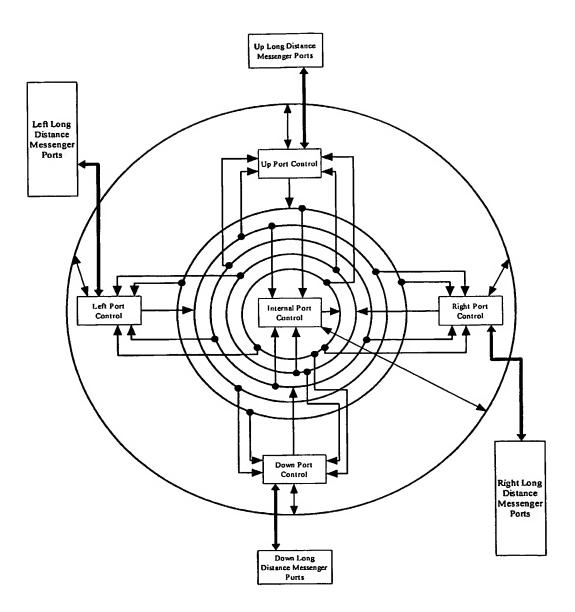


Figure 8, Long Distance Messenger

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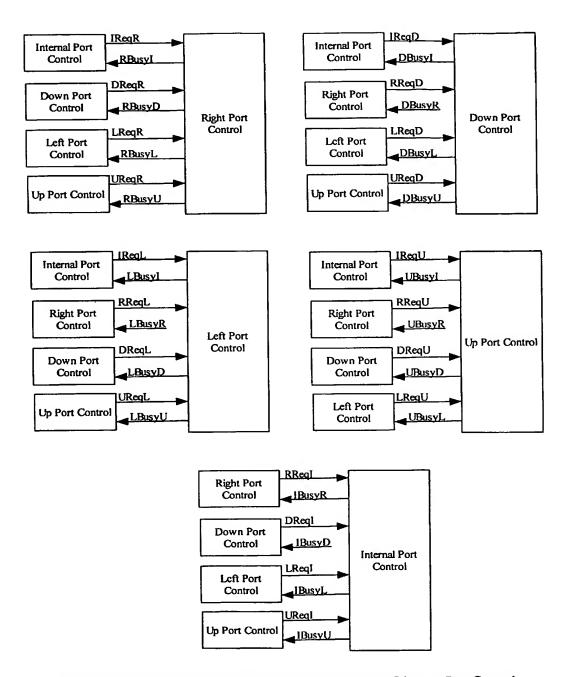


Figure 9, Request and Busy Information Shared Among Long Distance Port Controls

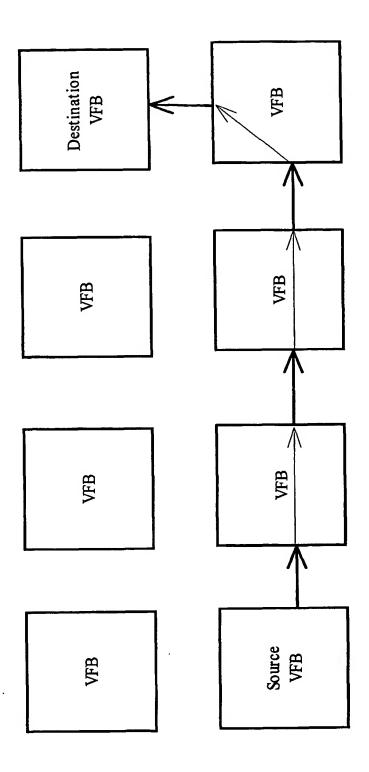


Figure 10, A Long Distance Message Connection, No Path Contention

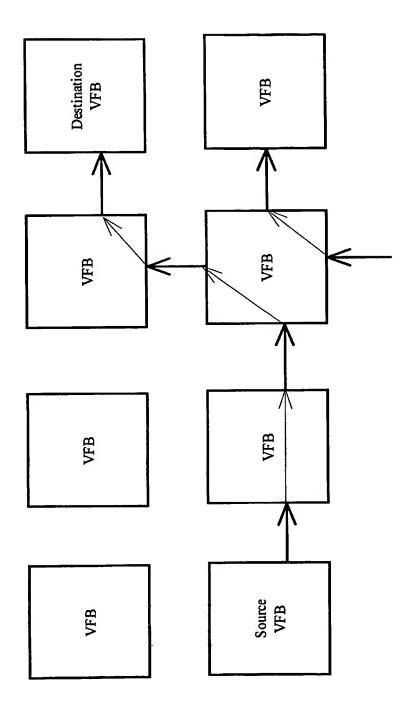


Figure 11, A Long Distance Message Connection, Path Contention Without Deny

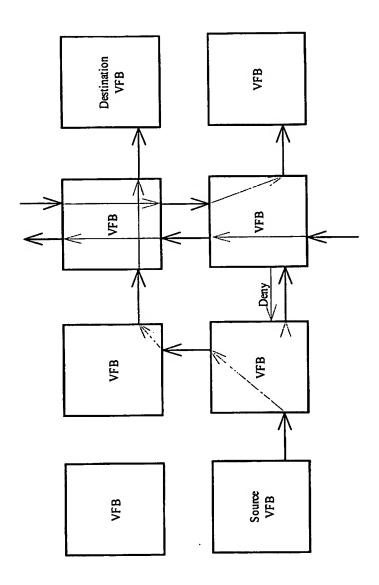
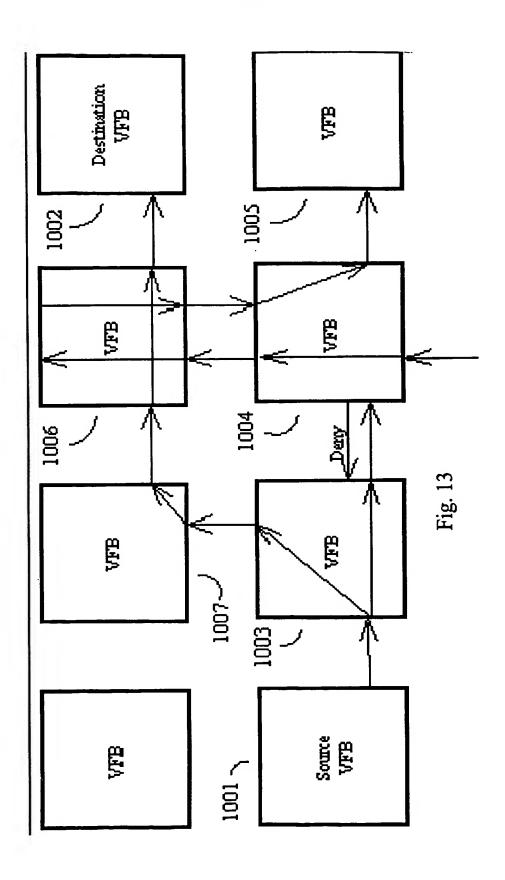


Figure 12, A Long Distance Message Connection, Path Contention With Deny



h SEND Assented? Speciality Transmission: Duma bayon the best Con-ferming Biled Transmission: No Decrement Delay Zoel Retry Delay Assert.Request MSG case LD Bus Yes No No in Circui Assessedi Yes Assert Strobe and Place Data on LD No No Yes Is Grant Yes

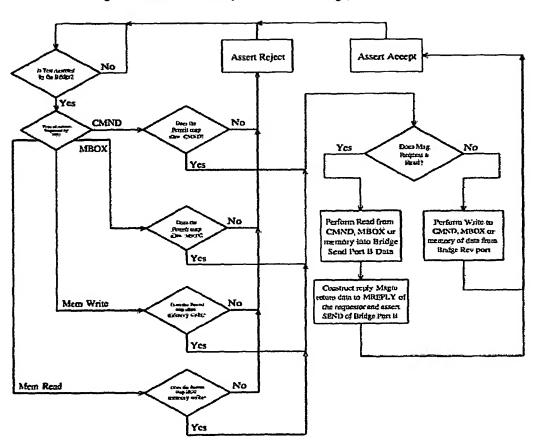
Fig. 14 Bridge Send Operation (Single Port, Optimistic Send)

is SEND Asserted? Speciality of the State of the No Palled Transmission: Describing on books, for they later, the war drop class. Decrement GRATY Delay Zess? Retry Delay Assert Rog and MSG care LD Bus Yes No No Le Cirent Yes Assert Strobe and Place Dam on LD li Grant Yes

Fig.15 Bridge Send Operation (Single Port, Pessimistic Send)

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Fig. 16 Permissions Test (Dual Send Port Bridge)



No No Yes. ि स्टब्स् कल्ला REQ msened? Yes Leish MSG and esser Grant No lis Strübe Liversech. Yes Latch Data and assert Test Reject. Whee was the Assert Abandon sesuk of Tour? Accept Parform memory cycle,deaasen Grant

Fig. 17 Bridge Receive (Optimistic)

No h REQ MARKET No Yes Is req and Revel nor used of Yes Latch MSG and assert Test Reject 'Ahui was the Assert Abandon mental Text Accept Assert Grant No حَرَاجِمَا \$ فِيْ Accession? Yes Latte Date and Deassert Grant, Ferbrin Mamory AssertRevd Cycle

Fig. 18 Bridge Receive (Pessimistic)